

processing device (not shown). In a preferred embodiment of the invention, stud bumps electrically attach the optical array 44 to the substrate 52. An optically transparent underfill 62 mechanically attaches the optical array 44 to the first surface of the substrate 64. The details of the optically transparent underfill 62 will be described in further detail below.

In the claims:

Amend claim 1 to read as follows:

1. (Once Amended) A method of providing an electro-optic interface for exchanging information signals, such method comprising the steps of:

disposing a unitary array of a plurality of optical devices adjacent a first side of an optically transparent substrate, such that a transmission path of each of the plurality of optical devices of the optical array pass directly through the substrate;

applying an optically transparent underfill between the substrate and adjacent optical array, with the plurality of transmission paths of the optical array passing directly through the underfill and where the underfill does not provide an electrical path for the optical device;

coupling an optical signal of each the plurality of optical devices of the optical array through the optically transparent underfill and optically transparent substrate between the optical array and an optical connector.